

SCARLATINA

AND ITS

TREATMENT

ON

HOMŒOPATHIC PRINCIPLES.

BY

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scarlatina, desire that it should be treated according to the views of Hahnemann.

§ 2.

I am far from pretending that medical men should, contrary to their intimate conviction, adopt in their practice generally the principles of the homœopathic doctrine, or the ideas that obtain in regard to the preparation of the medicines used in homœopathy; but I do not think I pass the bounds of reason when I ask that in scarlatina as much should be done as is conceded every day for so many other diseases, in which no hesitation is felt in trying new remedies, announced as having been found successful. Have not an infinite number of remedies, proposed for the cure of consumption, of gout, of cancer, of Asiatic cholera, and many other diseases, been essayed again and again, I may say almost without any consideration of the theoretical views of their inventors? I will here cite two examples of recent occurrence, and similar to one another. When Coindet, in 1820, introduced iodine into the *Materia Medica*, recommending it first for the cure of goitre and then of scrophula, it did not enter into the minds of the medical men who followed him to scrutinise his theoretical principles; on the contrary, all, to whatever sect they belonged, Cullenists, Brownists, Rascorists, Broussaisists, humourists, solidists, and eclectics, in a short time tried and adopted it, so that it is now an heroic remedy in universal use.

The same has happened in regard to creosote. Hardly had Reichenbach discovered this new preparation, and proposed it as a remedy in various maladies, than all the medical world hastened in competition to try its effects, without caring or knowing whether Reichenbach regarded it as an antiseptic, a styptic, a depurative, or otherwise.

Why, then, should not other remedies be generally tried which the practitioners of homœopathy, from their experience, propose with confidence as useful above all others in the cure of scarlatina?

It will, perhaps, be said, that a certain tenderness of conscience does not permit the adoption of new remedies when those already known succeed sufficiently well.

To this I shall reply, as I did fourteen years ago to my respected friend, Dr. Tommasini, Clinical Professor at Parma, on occasion of a prolusion of his, in which he spoke of homœopathy, and which he politely sent to me. He observed in this work, that he could not doubt the effects of infinitesimal doses of aconite in inflammations,

after the statements of the many able and respectable medical men, who affirmed that it supplied the place of bleeding, but that he would feel himself acting against his conscience if, in peripneumonia for example, he gave up a mode of cure sanctioned by the experience of more than two thousand years, to prefer to it the homœopathic method.

In thanking him for his book, I replied that, in making my first trials in homœopathy, I never departed from the suggestions of a timid conscience; for in cases of peripneumonia and other inflammations, I had never ventured to begin the cure with the homœopathic remedy, that is to say, with aconite in infinitesimal doses, excepting in cases where the symptoms not being formidable, I judged that bleeding could be deferred for a few hours without endangering the life of the patient, and I was prepared to resort to that remedy, and to all the antiphlogistic means if the effects of the aconite did not answer my expectations. Such cases are not of rare occurrence in general practice, still less are they rare in scarlatina, which seldom presents itself in the beginning with such violence as to prevent the most scrupulous medical man from trying a new remedy instead of the usual ones; and seeing the success of homœopathy in the less serious cases, conscience and reason will no longer oppose its being applied to all cases indiscriminately.

§ 3.

I will not suppose that what is called the infinitesimal smallness of the doses used by homœopathic physicians can ever be an obstacle to their use in scarlatina, from the fear of their being hurtful from their too powerful effects. I will rather conclude that medical men may hesitate to trust to such doses from considering them totally inefficacious. And, in fact, for him who has been accustomed to see no effect, even from the most powerful remedies, except when administered in measurable and ponderable doses, it must be hard to believe that a millionth, much less a billionth, a trillionth, or decillionth part of a grain, or of a drop of any remedy, can act on the human organism in any way.

Facts, however, prove that the action not of millionths only but even of decillionths of a grain, in acute as well as in chronic diseases, cannot reasonably be denied. For more than thirty years, not hundreds, but thousands of medical men, in every corner of Europe, in America, and other parts of the globe, have attested, and do attest, these facts; and any one may satisfy himself of their reality who

will visit the hospitals in which the sick are exclusively treated by homœopathic physicians, in Vienna, in Leipsic, in St. Petersburg, in Gyongyon near Pesth in Hungary, at Lyons, and at Bordeaux, or the dispensaries established for the poor in many cities of Europe, and of which there are several in London. At any of these establishments, persons may verify how quick is the action of infinitesimal doses in acute diseases, and how many advantages these small doses present over the large ones generally in use, and over the many tormenting modes of treatment so frequently put in practice in sickness,

Much might be said in regard to this proposition, and to show that the doses called infinitesimal cannot, and ought not, to be considered as simple attenuations or dilutions, but that they are properly called by Hahnemann dynamizations, or means employed for the development of the medical powers in remedies; but this is not the place to enter upon such a subject. I shall only observe, that it is very easy for any medical man to verify the effects of these minute doses, either on healthy persons, or in morbid states, where there does not exist "*periculum in mora*." Notwithstanding all this, I shall, regarding the homœopathic remedies to be adopted in scarlatina, point out, further on, for those whose minds revolt against trusting the lives of sick persons to the effects of infinitesimal doses, another mode of preparation more conformable to the received pharmaceutical ideas.

Very probably, in permitting myself to deviate from the rigorous injunctions of Hahnemann regarding the preparation of our medicines, I shall subject myself to the censure of some of my homœopathic colleagues, but I will not for this refrain from suggesting what seems to me likely to contribute to the progress of the art, to facilitate the practical adoption of the maxim, "*Similia similibus curantur*," and to give an impulse to the study of the works of Hahnemann, in which so much science is contained, as well as those of his principal follow-labourers and followers.

Where there is any room for conciliation, I do not see why it should not be occupied, not only for the advantage of our art and of those whose misfortune obliges them to have recourse to it; but more than all, to remove the principal cause of dissension between the followers of the new and the old medical doctrines.

For good medical treatment, the principal requisite lies first in the choice of the remedies, and only secondly in the mode of preparing and administering them.

In order to choose properly the truly homœopathic remedies in a

disease, it is an indispensable element to understand the malady in the most extensive and exact possible manner. Thus to be able to point out rationally the most suitable remedies in the treatment of Scarlatina, I shall proceed to give a most accurate, but brief description, of that disease.

CHAPTER II.

DESCRIPTION OF THE DISEASE.

§ 4.

SCARLATINA seems to have been one of the most anciently known diseases. Frizzi shows that the ancient Jews were acquainted with it. And though Hippocrates does not speak of it, Aretæus and Ætius, among the Greeks, Avicenna, Haly-Abbas, and Rhazes, among the Arabs, all make mention of it. Avicenna gives it the name of *Hemexa*, which signifies red beet.

Little, however, have these ancient authors left in their writings in regard to Scarlatina; the Italian Ingrassia is the first who has spoken at length of the disease; he refers to its being known in Naples previous to the year 1500 by the name of *Rossalia*.

The cause of this disease is a contagion *sui generis*, by which a healthy person may be infected as well by contact with a patient in whom the contagion has developed itself, by inhaling the effluvia, or by touching the clothes, linen, or other things used by him, and also simply by having communication with persons who have had intercourse with him.

Exposure to these influences is not, however, always absolutely followed by infection; to contract the disease a certain disposition of the organism is necessary, without which contagion is not received.

What the conditions are which render the frame unsusceptible of contagion is unknown; but, on the other hand, experience has taught us that persons become to the highest degree susceptible of being infected, who, from a great degree of heat and perspiration, are suddenly exposed to cold; that children, under ten or eleven years old, easily take the disease; that after twenty, men are little subject to it; and that women are always liable to it, even after the age of thirty, particularly those of delicate constitution, or in child-bed.

The scarlatina generally appears about the time of the equinoxes ; which proves that the atmospheric influences at these seasons augment in the human body the disposition to contract it. If it begins at the autumnal equinox, it usually lasts during the winter ; there are examples of its continuing several years in one town. During the eleven years that I have been in England, it has reigned with more or less force, but without ever giving truce, now in one province, now in another of the kingdom ; which I attribute to the frequency and facility of communication, greater in this country than in any other.

§ 5.

INCUBATION.

On the duration of the *stadium* of incubation, that is of the time which elapses from the moment of infection till that when the contagion begins to give signs of its presence by morbid symptoms, opinions vary between two and seven days. There can, however, be no certainty on this subject while there exists no sign to mark the moment when infection takes place. It has been said that persons who expose themselves to the effluvia of scarlatina, feel at the moment they are affected by them the taste of sulphate of copper on the tongue, and that they experience nausea and salivation ; but this statement is only to be found mentioned by Willan.

As in contagions which are communicated by simple contact or by inoculation, such as the plague, cowpox, &c. and in which we can be certain of the moment of the infection, it is observed that the duration of the stadium of incubation, during which the contagion remains latent, varies according to the different constitutions of the infected individuals, so I do not doubt that the same happens in regard to the contagion of Scarlatina, and that therefore a fixed time cannot be assigned at which it begins to invade and disturb the whole organism.

§ 6.

INVASION.

The morbid symptoms with which Scarlatina shews itself are, as in all the other forms of acute contagion, sometimes mild, sometimes very serious. The disease is generally divided into three principal forms : the mild, "*scarlatina simplex*,"—the inflammatory "*scarlatina inflam-*

matoria, scarlatina anginosa”—and the malignant, “*scarlatina typhoides, scarlatina maligna, scarlatina putrida*.” The nature of each form makes itself known from the beginning, and if sometimes in its course the mild form changes into a serious or very dangerous one, it must always be caused by new influences, such as a bad mode of treatment, errors in regimen, hurtful atmospheric influences, affection of mind, &c.

A. Mild scarlatina shews itself with a feeling of weakness, paleness of the face, slight shiverings, and successively heat, thirst, sometimes want of sleep, and sometimes restlessness, especially in children, with affection of the fauces, which are red, more or less painful, and at times swelled. Such affections of the fauces are characteristic of scarlatina, and are never absent, whatever may have been said by two or three authors, who have erroneously taken for mild scarlatina some other mild exanthema, somewhat similar, though actually different, or the affection of the throat has been so slight and of such short duration that it has not been observed.

B. In inflammatory scarlatina the symptoms consist for a few days in weariness, uneasiness, melancholy, weight in the head, hoarseness, and rigidity of the muscles of the back of the neck and of the lower jaw. To these succeed fever, with shiverings and excessive heat, frequent pulse, now hard, now depressed, dry and burning skin, face inflamed, eyes fulgid and red, scarlet colour in the throat, the palate, the velum pendulum, the tonsils, the tongue, and also the gums, sometimes accompanied with a swelling of these parts, and always with painful deglutition.

In subjects of a scrofulous diathesis the tonsils swell considerably, as sometimes also the submaxillary glands and the parotids. From the superficies of the tonsils a glutinous lymph exudes, which giving them a white appearance, might induce unpractised persons to suppose the existence of an internal abscess. Instead of this, the exudation sometimes gathers together here and there into small masses, that have the appearance of ulcerated points. Much viscid and glutinous lymph separates itself from the pharynx and the cavity of the mouth, which as it can only be expelled with very great difficulty, causes much uneasiness to the patients, menacing, at times, suffocation. Gastric symptoms seldom appear during this period. The bowels are usually constipated. During the night, an aggravation of the symptoms always takes place, in the course of which delirium is often observed, the respiration becomes panting, and, in children especially, convulsions are apt to ensue.

c. *Scarlatina Typhoides* presents itself always with extreme pros-

tration of strength and with vertigo, followed by fever with cold and then heat, and excessive pain in the head. The pulse, which at first is often full and hard; soon becomes small and frequent, and often irregular. Diarrhœa and vomiting come on, patients fall into lipothymiaë, or fits of stupor, or they suffer extreme anxiety and sleeplessness, and often from the beginning they are delirious, the eyes become turbid, or red and watery, and in deglutition there is rather a sense of constriction than of pain. The fauces are here also swelled, but the colour, instead of a bright, is of a dark red, and spots are seen of a livid and blackish tint, indicating the approach of gangrene; these livid spots are observed especially on the tonsils.

§ 7.

ERUPTION.

Twenty-four or thirty hours after the invasion of the malady, sometimes sooner, sometimes even four days later, there begins to appear on the skin the exanthema, preceded often by a sensation of prickling, as if by the finest needles, and by a burning heat. It consists, at first, in innumerable red points, set very close together, which soon enlarge, and running into one another, form large spots, by which extensive portions of the body become covered with an uniform scarlet colour like that of a boiled lobster.

In measles, the separation between the red coloured spots and the white skin is marked by a distinct outline, but in scarlatina, the colour becomes paler towards the outer edges, till, by degrees, it totally disappears. If an affected part is pressed by the finger, the redness disappears entirely, giving place to the natural white; the finger being removed, the red blush returns immediately, not, however, over the whole part at the same moment, but successively, propagating itself from the circumference towards the centre. In this, scarlatina resembles erysipelas, with the single difference, that in the first there is no swelling of the parts, if we except the hands, which not unfrequently swell so much that the patient cannot close them without pain, and sometimes, but rarely, the face and eyelids become slightly tumid. The two diseases resemble each other also in the state of the skin, which in both is very dry, and never perspiring, unless towards the end of the disease. This dryness of the superficies is such that the eyes, though red and tumid, never water, and the crusta lactea and similar diseases cease to ooze.

The parts where the eruption first appears, are usually, the face, the neck, the breast, the arms, and then the abdomen and

the inferior extremities ; but it does not always follow this order, and in the commencement, it happens sometimes that the exanthema leaves one part where it had already shown itself, to appear in another, and thence returning, till at last it fixes itself.

In mild cases, the eruption only partially covers the different parts of the body, and some it leaves wholly exempt, except almost never, the flexures of the joints. In serious cases, on the other hand, not only does it extend itself over all the surface of the skin, but it even propagates itself over the internal cavities of the viscera, as dissection of the bodies of those who have died from the disease during the height of the eruptive stage has shown. Tenesmus and dysury, which sometimes appear, announce its extension to the lower bowels and bladder. It is often evident in the nostrils, in the interior part of the eyelids, in the cavity of the mouth, and always in the fauces and on the tongue.

We have already described the morbid symptoms to which the mouth and fauces are liable. The tongue becomes very red over the whole surface, its papillæ lengthen and become rigid to such a degree, that they are seen rising even through the thick stratum of fur which usually envelopes it.

The eruption is generally complete in the course of a day or two, sometimes, however, in a few hours, and in some rare instances, it takes several days to come out fully, but it does not appear that this difference of time materially influences the disease for the better or the worse.

There are instances of scarlet fever in which no eruption appears on the skin, and the presence of the disease is only known in the beginning by the affection of the fauces, which in these circumstances are usually more severely attacked. The non-appearance of an eruption does not prevent the disease from being contagious, and in other individuals to whom it is communicated from such a source, it may be accompanied with eruption.

§ 8.

We must here call the attention of our readers to two different forms assumed by the eruption in scarlatina, because each of them requires a different medical treatment.

In the one, the skin remains smooth and even, as in erysipelas, (*scarlatina levigata seu plana*) ; in the other, it is covered with raised points or papulæ, about the size of poppy or millet seeds, (*scarlatina*

miliaria, miliformis, papulosa), which sometimes entirely red, more frequently with a white apex, usually appear on the large scarlet patches. When this miliary eruption is very thick, the skin most frequently does not lose the red colour under the pressure of the finger, or loses it only in a very small degree.

It happens not unfrequently that scarlatina is at one and the same time miliary on some parts of the skin and smooth on others; and it may be affirmed, that while formerly the miliary form of scarlatina was the exceptional one, for several years past the disease has appeared most frequently under the two forms together, and only in the most serious cases, the skin appears covered entirely with miliary papulæ. When several papulæ run into one another, there results a much larger pustule, and when these pustules are numerous, the scarlatina receives the epithet of pustular or vesicular, (*pustulosa, vesicularis, phlyctænosa*.)

In mild scarlatina, as soon as the eruption ceases to come out, the fever, the affection of the throat, and the redness of the skin begin to diminish, and in the course of three or four days all disappear; it is then, the last stadium of the malady, that of desquamation, commences.

In inflammatory scarlatina the fever does not always begin to diminish immediately, it often rather augments, and in such cases inflammations of the brain, the ears, the trachea, the lungs, the stomach, the intestines, and the bladder, are apt to occur, and under one or other of these severe affections the patient frequently sinks. If these inflammations of important organs do not take place, the fever and eruption continue to decrease for four or five days, at the end of which time copious perspirations commonly ensue, and to them succeeds the desquamation.

In robust individuals, and in miliary scarlatina, the fever and the eruption disappear more slowly.

When the fever that accompanies scarlatina is of a typhoid character, the colour of the skin becomes of a livid red, and there appear petechiæ and vibices, besides the frequent addition of the miliary rash; hemorrhages, subultus of the tendons occur; there appears gangrene of the fauces which frequently extends to the ear, and to the nostrils, causing serious inconvenience; all the symptoms of this malignant fever successively present themselves, and if a favourable crisis does not occur the patient dies in a short time.

§ 9.

DESQUAMATION.

Desquamation is like the affection of the fauces, one of the characteristic and unfailing signs of scarlatina, and serves to render certain the previous existence of the disease, even when there has been no cutaneous eruption; if it be sometimes wanting it is always a sign of some imminent dangerous malady.

Usually two different kinds of desquamation may be observed occurring at two different periods. The first begins three or four days after the eruption, and consists in a minute furfuraceous or scaly exfoliation which separates from the skin with the slightest rubbing. The other does not begin till the seventh or eighth day after the eruption, and sometimes even later, and in this the cuticle separates not so much in scales, as in pieces of various forms and sizes. There are examples of its detaching itself entire from the foot, in the form of a sock, and from the hand like a glove, and with this the nails have sometimes come away also. Sometimes desquamation takes place in the throat, the palate, the tongue, the interior of the nostrils, and fragments of cuticle are also seen in the urine, proving that the efflorescence had extended itself even to the internal surface of the bladder. The skin covered by the new cuticle that succeeds to the old, remains for some time more sensitive than usual, especially in the palms of the hands and soles of the feet. The desquamation often ends in the course of eight or ten days, but at times continues for two or three weeks, or even longer. Usually the desquamation is preceded by perspirations, and from the time these perspirations appear, and the desquamation commences the malady is on the decline.

It seems to me that this is the point at which the contagion ceases to act on the organism, in consequence of that peculiar change which acute contagions in general effect in living body, a change which renders it unsusceptible, after having reproduced them of being influenced by them a second time. I consider desquamation, therefore, solely as a sequel of the pathological alteration produced by the contagion in the surface of the skin, and not as depending on the continued action of the contagion, although this continues still to exist and reproduce itself. That, in fact, the contagion exists, and continues to reproduce itself during the desquamation and for some time after this has ceased, seems to me sufficiently proved by the

fact, generally admitted, that the infection of scarlatina may be transmitted, and often is transmitted during the whole of this period.

§ 10.

SEQUELÆ.

Under the name of sequelæ of scarlatina, authors enumerate a great variety of diseases; but, if the subject be examined with attention, it will be perceived without much difficulty, that these maladies have no real connexion with the exanthema, and do not depend on it; and on the contrary, that they are merely the consequence of the disturbance produced in the organism by the severe fever which so frequently accompanies it. One disease only, in my opinion, can be truly called a consequence of scarlatina, because it appears very frequently even in the mildest cases, either where the treatment has been faulty, or where certain precautions have been neglected. This disease is the subcutaneous dropsy or *anasarca*. If during the time of the desquamation, or soon afterwards, the convalescent is exposed to cold, commits errors in diet, suffers from some violent mental emotion, is exposed to a sudden suppression of a critical evacuation, such as sweat, diarrhœa, diuresis, &c., the probable consequence will be anasarca.

This usually first shows itself in swellings of the eyelids, face, and hands, and from thence it extends itself to the inferior extremities, and to the whole surface of the body. Sometimes water is even collected in the internal cavities, especially after inflammatory scarlatina. The approach of this malady is indicated by great languor and depression of spirits, without apparent cause, loss of appetite, constipation of the bowels, diminution of urine, suspension of the desquamation and, in the majority of cases, a return of fever. The urine becomes of a bloody colour, more or less intense, and generally shows a rosy sediment, which is due to the presence of the red globules of the blood.

Adults are seldom the subjects of this complaint. In some epidemics, more children die of anasarca, than of scarlatina; generally, however, it is not very fatal, if well treated, and if it does not pass into dropsy of the abdomen, the chest, or the head.

§ 11.

PROGNOSIS.

The contagion of the scarlatina is not a miasm of a very irritating kind; so that when it invades a healthy organism, it can only excite a sub-inflammatory state, which may be overcome by the force of nature, aided by a well ordered regimen. The only danger to which such patients are exposed, is that by neglecting proper precautions, they may be attacked by anasarca.

When, on the other hand, the contagion seizes on an organism disposed to inflammation, to putridity—so called, or to scrofula, inflammatory or typhus fever may take place, as well as inflammation of the viscera and gangrene, maladies all threatening life; and hence, as such cases are frequent, scarlatina is in general to be considered as a very dangerous disease.

CHAPTER III.

TREATMENT.

§ 12.

ACCORDING to the principle of Homœopathy, *similia similibus curantur*, which means that diseases are cured by remedies capable of producing in a healthy body similar maladies, belladonna ought to be, and is, the specific remedy for scarlatina.

In the last years of the past century Dr. Hahnemann, in making experiments with belladonna on healthy subjects, observed, among many other symptoms, that this substance produced a kind of smooth scarlet eruption, and inflammation of the fauces and tonsils, with difficulty of swallowing. According to his therapeutical principles, already given to the public in 1796, he concluded from these symptoms that belladonna must be the best remedy for scarlatina, and he proposed to put it to the proof on the first occasion that occurred. A favourable opportunity soon offered itself in an epidemic of this contagion, which for some years afflicted a great part of Germany, and in which hardly ten, in each hundred persons attacked, recovered. He ad-

ministered belladonna to his patients, and the happiest success crowned the attempt, and confirmed his views; the number of patients he lost was extremely small.

From that period all homœopathic physicians have made use of it, and they may boast that fatal cases are very rare under their treatment.

This remedy, however, is not of equal utility in the two species of scarlatina which we have above distinguished. It is chiefly adapted to the smooth or even scarlatina; in miliary scarlatina, on the contrary, it is of small avail employed by itself: here, indeed, aconite must be regarded as the principal remedy.

This medicine, which may justly be called the antiphlogistic *par excellence*, for it supersedes blood-letting in all cases of true phlogosis, is pointed out as the appropriate remedy in miliary scarlatina by the inflammatory nature of the fever which always accompanies it, and by the property it possesses of producing on the healthy human frame an eruption of very minute pimples.

Besides belladonna and aconite, other remedies may be required against some distressing or dangerous symptom dependent on peculiar circumstances, as well as against the typhoid fever, which may take place; but of these we shall make mention in their respective places.

§ 13.

Before proceeding further, it is proper here to determine what preparations of belladonna and aconite, and other remedies are to be preferred, and in what doses they should be administered.

An experience of eighteen years in homœopathic practice has fully convinced me of the efficacy and suitableness of the remedies reduced to the smallest doses, according to the modes suggested by Dr. Hahnemann. To these I shall always adhere, with slight modifications, as well because they offer an extended series of different degrees of strength adapted to all degrees of disease, and of susceptibility in different individuals, as because their action in acute maladies is the most rapid, and, because the patient is saved from the disgust of the usual medicines, which, in children, is an advantage of no small moment.*

In many cases, however, more *material* preparations may be used with equal success, solely modifying the doses, and choosing those

* For the mode of preparing the remedies for the use of homœopathic physicians, see appendix at the end.

preparations which are most equal in their action. From this last consideration, extracts, whether of belladonna, aconite, or any other plant, ought to be entirely rejected. Their preparation on the open fire, or in sand-baths, most frequently trusted to inexperienced hands, exposes extracts to be altered, so that they are never found of the same strength, not only in the shops of different druggists, but now and then not even in the same establishment at different times, so that the physician runs the risk of not obtaining the effect he desires, or of obtaining it in an excessive and dangerous degree.

The easiest, simplest, and at the same time the surest and most equal mode of preparation is that taught by Dr. Hahnemann. It consists in taking the fresh plants of belladonna or aconite at the period at which they begin to shew the flower buds, cutting them in very minute pieces, and reducing them to a pulp by beating them in a mortar of porphyry or crystal, pressing the juice through a piece of linen cloth, and mixing it with highly rectified alcohol, shaking it from time to time for twenty-four hours, then leaving it to subside, and pouring off, or passing through paper, and preserving the clear part in well closed bottles. As alcohol is the best solvent of the medicinal parts of plants, and the juice of every fresh plant contains these medicinal parts in their most pure, most unaltered, and most concentrated state, it is evident that this preparation must be more efficacious than any other, and of a degree of strength always equal and uniform.

Five grains or about ten drops of this essence, which contain the medicinal power of two grains and a half of the juice, may be regarded as equal in strength to one grain of the best extract.

Such a preparation to which the name of *essentia fortis* or mother essence is to be given, would be too strong to be used even in doses of one drop, especially of belladonna; it becomes, therefore, necessary to procure a weaker preparation. For this purpose two scruples of distilled water must be mixed with one scruple of alcohol in a small phial, and the mixture must be shaken till no air-bubbles appear; then to this ten drops of mother essence are to be added, shaking again with three or four strong jerks of the arm. This mixture is to be called *weak essence*, in contradistinction to mother essence, and every drop of it, which may be considered to be equal in weight to half a grain, will contain the medicinal strength of 1-120th of grain of extract, so that twelve drops will be equal to 1-10th of a grain.

For children of about a year old, one drop of weak essence mixed in a tea-spoonful of water, will be a sufficient dose, which may be repeated two, three, or four times daily, according to circumstances. For older children an addition may be made of a fourth or a third of a

drop in each dose, for every year above that period; so that for a child of ten years old the dose may be increased to four drops, and at fifteen years to six drops at the most. With belladonna it may be best never to exceed this dose; with aconite more latitude may be permitted.

§ 14.

ADMINISTRATION OF REMEDIES.

PERIOD OF INVASION.

If the physicians were consulted on the first appearance of indisposition in an individual infected by the contagion of scarlatina, and could be quite certain of the cause of such indisposition, scarlatina would, in most cases, prove a very mild disease; for a dose or two of aconite or belladonna, speedily administered, would almost always suffice to shorten its course, and to divest it of all danger.

But medical aid is seldom called on the first appearance of morbid symptoms, and seldom too at the commencement of these symptoms can we be sure whether they arise from the contagion of scarlatina, or from some other cause.

If, however, there reigns an epidemic of scarlatina, if the person complaining has been exposed to its contagion, and if no other occasional cause appears to explain the indisposition, then the influence of this specific contagion may be reasonably suspected, and a dose of aconite or belladonna, according to the symptoms, may be given without delay. The indications for prescribing aconite are, the presence of inflammatory fever, especially in young and robust subjects, and a reigning epidemic of miliary scarlatina in the neighbourhood. The preparation of the weak essence (§ 13), or some globules of the 24th dynamization* may be administered, proportioning the dose to the age of the patient. If, on the other hand, the fever be not violent, if the throat is red and painful, if the skin itches, and the epidemic which reigns be rather the smooth than the miliary scarlatina, belladonna should be given, either the weak essence or the thirtieth dynamization. If to the symptoms last mentioned

* See Appendix.

violent fever, with hard pulse, headache, and excessive heat are joined, it is proper that six or eight hours before the belladonna is had recourse to, a dose of aconite should be administered. These remedies having been given, an interval of about twenty-four hours should be allowed to elapse, in order that the character and the progress of the disease may be accurately observed. During this time particular care should be taken to regulate the diet of the patient, which ought to be very light. The best drinks are a thin weak emulsion of sweet almonds, with a little sugar, without the addition of any thing else to give it flavour or perfume, barley-water, rice-water, toast and water, and pure water. Acid drinks do not agree with the employment of belladonna and aconite.

As many persons have a mistaken idea that patients in scarlatina should be kept very warm, and as mischief sometimes ensues from acting on this presumption, it is necessary to insist on the room being kept neither too hot nor too cold; the patient ought to lie on a mattress, not on a feather-bed, and should be allowed to cover himself according to his feelings; the patient's sensations being in such cases a safe guide.

If gastric symptoms should come on, such as nausea, some slight vomiting or relaxation of the bowels, it is advisable not to attempt to subdue them by special remedies; these symptoms being generally secondary, will disappear under the action of one or other of the remedies pointed out. In case, however, they should assume a serious aspect, in order to stop the vomiting a dose from one to four globules of the third dynamization of tincture of ipecacuanha, or from a quarter of a grain to one grain of ipecacuanha in powder, or a proportionate dose of the syrup of this medicine may be given. Against the diarrhoea a dose from a globule to three globules of the twelfth dynamization of chamomilla matricaria or a small quantity of the infusion of its flowers in boiling water, may be ordered. In case of inaction of the bowels, a clyster of plain water may be administered at the beginning, but afterwards it is really not necessary to attach to this symptom so much importance as people generally do. If the intestines have been evacuated at the beginning of the disease, either naturally or by means of an injection, there is no reason to fear that under the low diet which should be observed during this disease, any extensive accumulation of fæces will take place. I have seen constipation continue for seven or eight days without the slightest inconvenience.

§ 15.

PERIOD OF THE ERUPTION.

After the appearance of the eruption on the skin, it is necessary to ascertain whether the scarlatina be smooth or miliary. In smooth scarlatina belladonna alone is sufficient to shorten, mitigate, and cure the disease, if there be no complication arising from other causes. One, two, or three globules of the thirtieth dynamization dissolved in four or six tea-spoonfuls of water, giving the second spoonful two hours after the first, and the others after five or six hours of interval, are sufficient in many cases to accomplish the cure.

With this mode of administering the remedies, there is the facility of giving a fraction of a globule at a time, and the accident of aggravation of the disease, which a too strong dose not unfrequently produces for some hours, will be prevented. If the violence of the disease renders it necessary to repeat the medicines, successively lower dynamizations should be had recourse to, such as the fifteenth, the ninth, the third, giving of each a globule, divided by means of solution into two doses, to be given at long intervals of six or twelve hours; however, of the third a whole globule may be given at once.

Instead of these preparations the weak essence of belladonna, as mentioned (§ 13) may be given, repeating the doses with caution to avoid aggravations. This remedy will also overcome in the greater number of cases the affection of the fauces, by virtue of the property it possesses of producing quinsy in healthy individuals; but in subjects of scrofulous or scorbutic diathesis, it is frequently found insufficient to check the inflammation and swelling of the tonsils, and in such a case instead of repeating belladonna, it will be useful to prescribe mercury.

One, two, or three globules of the fifteenth dynamization, mixed in three tea-spoonfuls of water, taken in the course of six or eight hours, half a tea-spoonful at a time, will be sufficient quickly to remove the inflammation, and by degrees also the swelling of the tonsils. Instead of this preparation from two to six hundredths of a grain of Hahnemann's soluble mercury in powder may be given, or from two to six grains of the first trituration (see Appendix), repeating this dose when necessary. To say the truth, I have never prescribed this mercurial preparation in such circumstances, being unwilling to expose the patient to the pain of swallowing a powder,

but I have no doubt of its effect, mercury being in this case quite a homœopathic medicine.

When, from the fauces being much affected, a great quantity of ropy, viscid mucus is secreted, which cannot be expelled, and sometimes threatens suffocation, one or two globules of the thirtieth dynamization of *nux vomica*, placed on the tongue of the patient, will suffice to make this abundant and inconvenient secretion cease in the course of a few hours; with half a drop or one drop of mother tincture of *nux vom.* (appendix) mixed in a tea-spoonful of water, the same effect may be obtained, although accompanied to the patient with inconvenience in swallowing the medicine, and for the disgust caused by its bitter and acrid taste.

Nux vomica will also be of great advantage when black specks appear on the tonsils, and small foetid ulcers show themselves within the mouth, these being usually indications that the disease is assuming a typhoid character.

In regard to miliary scarlatina, which is always accompanied by inflammatory fever, aconite is the principal remedy. When the affection of the fauces is severe and the tonsils are much swelled, it will be proper after aconite to administer belladonna, and also to have recourse to mercury and to *nux vomica*, in the circumstances above pointed out; but it will often be found necessary to alternate these medicines with aconite, in order to keep down the force of the fever.

On the other hand, when the miliary eruption consists only of a few pimples scattered here and there, and the rest of the skin is covered by the smooth efflorescence, aconite should be used very sparingly.

Miliary scarlatina, much oftener than the smooth, when not well-treated, or left to itself in the beginning, is apt to be converted into scarlatina typhoides. It is true that in some epidemics the typhoid character shows itself generally even in the invasion of the disease; but happily this form of the malady is not of frequent occurrence.

On the occurrence of such a type of scarlatina, it would be necessary to deviate from the treatment now suggested, and this in accordance with the variety of symptoms that prevails.

Whenever there exists burning heat of surface, great sense of anxiety, much agitation, with vomiting, diarrhœa, or obstinate constipation, convulsions, and above all, a drowsy or lethargic disposition, opium is the appropriate medicine, in doses of from one to four

globules of the sixth or ninth dynamization, placed on the tongue of the patient; or one or more drops of the mother tincture, mixed with a little water, and sweetened with sugar if desired, may be substituted. In case the stomach proves irritable, and medicines are rejected by vomiting, a half or a whole square inch of paper, saturated with the tincture of opium, and kept on the pit of the stomach of infants till dry, will have the desired effect. I have never employed this means, but it was used by Hahnemann forty-four years ago, and others have since followed the practice with success. The threatened mischief to the brain being averted by the use of opium, it will probably be found convenient to follow this medicine by aconite.

If instead of stupor there is want of sleep, total loss of appetite, nausea and vomiting; if infants are very fretful, crying for everything, groaning, and if the fever increases regularly towards evening, it will be proper to give ipecacuanha, either in powder in doses of from a tenth of a grain to a grain, or one or more drops of mother tincture, or one or more globules of the third or sixth dynamization. Ipecacuanha will also be found a most useful medicine, if, during the course of the disease, tonic convulsions come on. In case of clonic convulsions, hyoscyamus should have the preference.

Should extreme weakness supervene, with great anxiety, and a constant desire to shift the position of the limbs, arsenic will be indicated, especially if at the same time there are aphthæ in the mouth. One, two, or three globules of the thirtieth dynamization taken at once, or in fractions by mixing them in water, or one or more doses of the hundredth of a grain of arsenic each, that is to say, doses of a grain each of the first trituration (appendix), will produce in this case the happiest effects, and may save the patient.

§ 16.

PERIOD OF DESQUAMATION AND SEQUELÆ.

When desquamation begins, the disease may be considered as ended, and in the greatest number of cases there is no need of further medicines, if we except, perhaps, a slight dose of belladonna, which contributes to shorten the duration of this period, in case of its being prolonged, and to prevent the risk of the appearance of anasarca. The better to guard against this danger, it is always indispensable that the patient live moderately, and that above all, he do not expose himself to the open air. I constantly insist much on the last precaution, though experience

has shown that patients who have been treated in the manner above explained are infinitely less exposed to dropsy than those who are treated allopathically.

Whenever, from whatever cause, anasarca comes on, it is easily cured by means of *bryonia alba*, or of *rhhus toxicodendron*, or of *helleborus niger* or *digitalis purpurea*, in doses of from one to three globules of the thirtieth dynamization. The weak essences of these plants, prepared like those of belladonna and aconite, whenever the dynamizations are not to be had, may be adopted equally. I have seldom had occasion to have recourse to these medicines, but wherever I have seen a beginning of dropsy, I have almost always quickly succeeded in dissipating it with *bryonia*. *Rhus* seems to succeed best when the anasarcous swelling is greatest towards the inferior extremities, and hellebore when the swelling appears almost instantaneously over the whole body. *Digitalis* may come in aid of the other medicines if they fail to produce the desired effect.

§ 17.

PREVENTION OF SCARLATINA.

Belladonna, besides the virtue of curing scarlatina, possesses also that of preventing its being contracted.

This practical fact, discovered by Dr. Hahnemann more than forty years ago, and neglected at first, was afterwards denied and asserted alternately by medical men of the highest repute. This apparent discrepancy arose, in my opinion, from due distinction not having been made between the smooth and the miliary scarlatina. Belladonna is only a preservative against smooth scarlatina, and, therefore, it remains without effect when the prevailing epidemic is miliary scarlatina. Against this, the preservative is aconite.

Now as these two epidemics reign almost always at present promiscuously, whenever prudence suggests the use of a preservative, aconite and belladonna should be administered alternately.

The doses of these medicines ought to be the same as those indicated for the cure, but taken at long intervals, beginning with aconite when miliary scarlatina is dreaded, and with belladonna if it be smooth scarlatina, and continuing the use of these medicines alternately. To aconite, one day is the time which should be allowed for completing its action; to belladonna, from three to six days should be given.

In robust and active persons who perspire much, the action of belladonna will be extinct in the course of about three days; in persons in different conditions, its action may continue for six or seven days.

During the time of taking the preservatives, it is necessary, in point of regimen, to abstain from those things that may weaken or destroy the action of the medicines, such as wine, spirits, coffee, strong perfumes and acids; it is also necessary to avoid with great care, colds, indigestions and strong mental agitations; because whatever affects the health appears greatly to facilitate the action of the contagion; the preservative may therefore not be a sufficient protection in such circumstances.

Before concluding this article, I think it proper to call attention to the fact, that there exist individuals endowed with such sensibility to the effects of medicines, that the smallest doses of belladonna, when taken as preservatives, will cause in them sore-throat, swelling of the tonsils, and erysipelatous appearances on the skin, which may at first sight be mistaken for scarlatina. The absence, however, of fever and of the greater part of the initiatory symptoms pointed out under § 6, will quickly make an attentive observer aware that there is no question of any thing but of a slight *medicinal* disease, and that a few grains of camphor, from two to six, according to circumstances, administered either in emulsion, or in pills, will remove it in the course of a few hours.

APPENDIX.

METHOD OF PREPARING MEDICINE FOR HOMŒOPATHIC PRACTICE.

ALL the medicines that can be obtained from the fresh plant are prepared in the following manner. The whole plant, or that part which is selected, is cut into small pieces and pounded in a mortar of glass or porphyry till it is reduced to a paste. This is squeezed in a piece of linen cloth with the hands or a wooden press, the juice obtained from it is mixed with an equal quantity of highly rectified alcohol; the mixture is shaken now and then for twenty-four hours; it is then passed through blotting-paper; or being left to subside for twenty-four hours, the liquid is poured off and preserved under the name of mother essence, or *essentia fortis*.

Dried vegetable substances are reduced to a powder, and infused in twenty parts of spirits of wine, (for example, one drachm of bark in twenty drachms of spirits), shaking the mixture two or three times a day during the course of eight days; this is then passed through paper, or poured off when clear, giving to it the name of mother tincture or *tinctura fortis*. This distinction of name between essence and tincture is of some importance, having for its object to mark the difference between the two preparations, the essence containing one half of remedy, and the tincture only one twentieth part of it.

To obtain the infinitesimal divisions used by homœopathic physicians, the first step is to dilute the essence or the tincture, so that the dilution shall contain only one hundredth part of medicinal power.

For this effect, as in the essences every two drops contain one of medicine, to reduce such essence from one half to a hundredth of power, two drops of essence must be mixed in ninety-eight drops of spirits of wine.

Of tinctures again, in which one part of medicine is dissolved in twenty of the liquid, twenty drops of tincture must be mixed with eighty of spirit, and thus the first dilution or attenuation is obtained.

To obtain successive attenuations, the process is continued from hundredth to hundredth; so that, by means of two or three ounces of spirit of wine and in the space of an hour, a dilution may be obtained equal to a deecillionth. In fact, mixing one drop of the first attenuation with ninety-nine drops of spirit of wine, there results a second division or attenuation, in which every drop of liquid will contain only a ten-thousandth of the medicine. Uniting then a drop of this second attenuation with other ninety-nine drops of spirit of wine, we have the third attenuation, containing a millionth of the medicine. Continuing thus to attenuate and divide in the same manner, there will be produced in the sixth attenuation a billionth; in the ninth a trillionth; in the twelfth a quadrillionth; and finally a deecillionth in the thirtieth, which is the last division that is in use.

Every attenuation requires a small bottle; and in order that the one drop of medicine should be mixed with the ninety-nine of spirit in the most perfect manner possible, the bottle when closed up should be held upright in the hand, and be shaken with three strong movements of the arm, not giving each successive shock until the vortex produced in the liquid by the preceding one has almost ceased.

These successive dilutions, which are really such, as far as regards the material part of the medicines, are however no dilutions at all of the potential part of the same; that is to say, of their medicinal power, which appears to be developed instead of diminished by these operations; and in fact effects much more marked are obtained by a drop of the thirtieth dilution, than by a drop of the first. For this reason, Hahnemann, with much propriety, has substituted the word dynamization *δυναμίς* to that of divisions, dilutions, or attenuations.

For the attenuation or dynamization of solid substances, a small mortar is required of unglazed porcelain, or of porphyry with their pestles, and a spatula of horn or ivory; and instead of spirit of wine, sugar of milk must be used, which when pure is without any medicinal virtue. Thirty-three grains of this sugar are placed in the mortar, and then one grain of the medicine, previously reduced to very small parts, is added to them, mixing first a little with the spatula, and then the whole is carefully triturated for six minutes with a certain degree of force. As during the trituration the sugar attaches itself strongly to the sides of the mortar, and to the pestle, so it becomes necessary to employ four minutes more to detach it with the spatula. This done, the mixture must be triturated again for six minutes more, and four minutes must be employed as before in detaching it. Thirty-three grains more of sugar are then added, and

the trituration and detaching must be recommenced, repeating this operation twice in the course of twenty minutes as above; and adding finally thirty-three more grains of the sugar, (making in all ninety-nine grains), the same operations of trituration and detaching are repeated for the third time in the course of twenty minutes; and thus, in the space of an hour, will be obtained the first attenuation, each grain of which will contain a hundredth part of medicinal power.

The second attenuation or dynamization is obtained by mixing one grain of the first with ninety-nine grains of sugar of milk, in three portions of thirty-three grains each, by the same process as above described; and the third dynamization is obtained by tritulating in the same manner one grain of the second with other ninety-nine grains of sugar of milk. After the third, the dynamizations to the thirtieth may be proceeded with more speedily. Dr. Hahnemann has observed that every substance, even the least soluble, when reduced to the third dynamization becomes soluble in water and in spirit of wine. If, therefore, we take for example one grain of the third dynamization of gold, which contains a millionth of gold and 999,999 millionths of sugar of milk, and we mix it in a hundred drops of weakened spirit of wine, shaking the mixture a little, the gold is dissolved in it, and it becomes the fourth dynamization; the fifth and the successive ones will be obtained by the method above indicated for the dynamization of the tinctures.

These preparations should be made in places where no effluvia of other medicines exists or of aromatics, or mineral acids, by which they would be impaired or altered.

